

SPECIFICATION

Please amend the specification as follows:

a. On page 1, please replace the second paragraph with the following amended paragraph:

The maximum amount of money that a person is willing to spend on a kind of product, for example, a camera or a car, is called the person's reservation price. The person's reservation price can also be represented as a probability distribution (the probability of a person buying a product at a price). When a product is sold at a single price, the customers with a lower reservation price will not buy the product and the customers with a higher reservation price are not fully exploited.

b. On page 2, please replace the second paragraph with the following amended paragraph:

In some instances several prices are used for selling the same product. These different prices are usually supported by differences in the details of functionality's functionalities and services that the customer will get. This is called multiple discriminant pricing or product price differentiation. By having multiple prices, a larger area underneath the demand curve is obtained, giving higher revenue. In other words, customers are segmented according to the price that they will pay for the product.

c. On page 13, please replace the first paragraph with the following amended paragraph:

Computer system 10 also includes a data storage device 20 ("disk subsystem") such as a magnetic or optical disk and disk drive coupled with the bus 12 for storing information and instructions. Data storage device 20 can include one or more removable magnetic or optical storage media such as disk drives, magnetic tape, ~~Computer Disks~~ Compact Discs (CD's), ~~Digital Video Disks~~ Discs (DVD's), etc.

d. On page 15, please replace the first paragraph with the following amended paragraph:

Figure 4A illustrates a graph that shows a demand curve 50 having an arbitrary structure that is concave. Number of units is indicated on the vertical axis and price is indicated on the horizontal axis. Price can be in dollars, pounds, or in any desired monetary unit. In the embodiment shown in Figure 54A, an initial price p is selected. It can be seen that price p is the lowest price on demand curve 50.

e. On page 16, please replace the first paragraph with the following amended paragraph:

As shown by step 104, a second angle is determined. In the present embodiment the second angle is determined by calculating the angle between the first reference line and a second reference line. The second reference line passes through the origin and passes through the demand curve at the price selected in step 102. The second angle can be calculated manually or in an

automated fashion. In one embodiment computer 10 of Figure 2-3 is used to calculate the second angle.

f., g. On page 17, please replace the third paragraph with the following amended paragraph:

The second angle 65 is then determined (step 104 of Figure 32). First, the second reference line 64 54 is drawn. Second reference line 64 54 is the line that runs through the origin (0,0) and that passes through the demand curve at price p_n . The second angle, shown as angle 65, extends between first reference line 61 and second reference line 64. In the embodiment shown in Figure 4D, first angle 63 is equal to second angle 65. Therefore, the process ends with the price p_n maximizing revenue for demand curve 50.

h. On page 20, please replace the last paragraph with the following amended paragraph:

Figures 7A-7H-7A-7D illustrate method 600 for an exemplary demand curve 50. Referring now to Figure 7A, a first price p_1 is shown that intersects demand curve 50 at n_1 units. Third reference line 72a extends from the x-axis to demand curve 50 and extends parallel to the y-axis at a price of p_1 .

i. On page 22, please replace the second paragraph with the following amended paragraph:

The next price is calculated as shown by step 604. In the present embodiment, the next price is calculated by determining the price that corresponds to the number of units determined in step 603. Geometrically this is determined by drawing a line parallel to the x-axis that intersects the y-axis at the same point as the second reference line and drawing a line downward vertically from the demand curve where the line intersects the demand curve. In the embodiment shown in Figure 7B 7D, the next price p_2 is shown to be the price that corresponds to number of units n_2 along demand curve 50.

j. On page 23, please replace the first paragraph with the following amended paragraph:

In the embodiment shown in Figure 7B, a steps 601 is performed so as to calculate tangent line 87a that is tangent to demand curve 50 at price p_2 . In step 602, first reference line 88a is determined by generating a line that is parallel to the x-axis and that intersects the demand curve at price p_2 . Angle 89a is the angle that extends between first reference line 88a and tangent line 87a. Referring now to Figure 7B second reference line 90a is located such that angle 91a is equal to angle 89a.

k. On page 23, please replace the first paragraph with the following amended paragraph:

For the first price p_1 , the vertical reference line is the y-axis. For all other prices, the vertical reference line is a line that runs vertically at the previously

determined price. Thus, the vertical reference line is moved to a subsequent determined price (e.g., prices p_1-p_3) after each calculation of a new price. In the present embodiment, vertical reference line 72a is used (which extends vertically at price p_1) for determining the intersection with the second reference line 90a that passes through price P_2 . The intersection of the second reference line 90a and vertical reference line 72a is (step 603) point 73a. Referring now to Figure 7C, point 73a corresponds to a number of units shown as n_3 . The corresponding price p_3 is then calculated (step 604).

- I. On page 24, please replace the last paragraph with the following amended paragraph:

When the geometric error is not minimized as shown by steps 607 and 608 the first price is changed and steps 601-6078 are again repeated using the newly determined first price. In the present embodiment, the first price is incremented by one unit (e.g. one cent) each time that the first price is changed. This process continues (steps 601-608 are performed) until prices are found at which geometric error is minimized. Continuing with step 607, when the geometric error is minimized the most recently determined first price and additional prices maximize revenue for the given demand curve and the process ends.

- m. On page 25, please replace the last paragraph with the following amended paragraph:

Though the steps of methods 600 and 700 are is discussed with reference to angles and lines that are geometrically located, calculated or drawn, in the present embodiment, methods 600 and 700 are is performed using mathematical calculations entirely performed within a computing device.

n., o. On page 26, please replace the first paragraph with the following amended paragraph:

Method 800 illustrates a method for determination of prices for multiple products that optimizes revenue. In the present embodiment, revenue is maximized for a given budgetary constraint. More particularly, for a given set of demand curves shown to be provided in step 801 and a set of initial prices are provided in step 8062, and number of prices shown to be provided in step 8023, prices that maximize revenue are determined.

p. On page 28, please replace the last paragraph with the following amended paragraph:

Additional prices are then determined that maximize revenue as shown by step 807. More particularly, for each demand curve provided in step 801, prices are determined (with the number being equal to the number provided in step 802) that maximize revenue. In the present embodiment, the steps of methods 3100, 500 or 600 are performed to determine prices that maximize revenue by finding the optimal p_1 for each demand curve under the chosen p_0 . More particularly, when one additional price is to be determined method 3100 is used and when two or more additional prices are to be determined methods

500 or 600 are used to determine the additional prices. This is done for each demand curve provided in step 801. Because the initial price p_0 is set in step 806, the number of additional prices to be determined is the number of prices input in step 802 less one. In the embodiment shown in Figure 9, the number of prices to be determined (input in step 802) is five, giving a number of additional prices to be determined of four.

q. On page 29, please replace the second paragraph with the following amended paragraph:

In the present embodiment the initial price of p_0 is used as a first vertical reference line. Thus, in the embodiment shown in Figure 9A, line 183a is used as a first vertical reference line. The intersection of the second reference line 184a and vertical reference line 183a (step 603) is at point 185a which gives a price p_2 and a corresponding number of units shown as F (p_2).

r. On page 31, please replace the first paragraph with the following amended paragraph:

As shown by step 809, the total cost of products is compared with the total budget (entered in step 805). If the total cost of products is not equal to the budget as shown by steps 809-810, the multiplier is changed and the process of steps 8064-809 is repeated until a multiplier is found that gives a total cost of products that is equal to the budget. In the present embodiment the multiplier is increased when the total cost of products is less than the

budget and the multiplier is decreased when the total cost of products is greater than the budget.

s. On page 32, please replace the first paragraph with the following amended paragraph:

Though the steps of methods 600, 700 and 800 are discussed with reference to angles and lines that are geometrically located, calculated or drawn, in the present embodiment, methods 600 and 7800 are performed using mathematical calculations entirely performed within a computing device. For example, in the embodiment shown in method 800 the following equation is used to determine prices that maximize revenue and that meet the budgetary constraints input in step 805.

Applicants request the specification objections be removed.